

Hayden Road Improvements: Project Narrative

Cactus Road to Redfield Road

The existing site is a section of roadway approximately 1.2 mile in length. The Hayden Road improvements will be between Cactus Road to the south and Redfield Road on the north. The existing site includes the existing roadway, unpaved shoulders, sidewalks, open channel, signage, traffic signals, streetlights, and scattered native and homeowner installed landscape planting within the existing right-of-way.

Hayden Road is currently a five-lane roadway from Cactus Road to Sweetwater Avenue. At Sweetwater, Hayden Road narrows to four lanes until Thunderbird Road; then reverts to five lanes from Thunderbird Road to Redfield Road. The section of Hayden Road with four lanes, from Sweetwater to Thunderbird has homes fronting along the western side of the road and side street access into adjoining neighborhoods along the eastern side of the roadway. The Hayden Road and Cactus Road intersection has a single northbound left turn lane and a single eastbound turn lane. There is an approximately two-foot drop from Redfield Road to Hayden Road across an existing box culvert that crosses Redfield Road that causes traffic flow problems due to the severe transition in roadway profiles. A soil cement lined open channel is located along the east side of Hayden Road from Cactus Road to Thunderbird Road and no sidewalk exists along this channel. Existing unpaved shoulders along the channel are being used for pedestrian access along the east side of Hayden Road. There is a meandering sidewalk along the west side of Hayden Road from Sweetwater Avenue to Thunderbird Road. Site inventories and site visits were also used to document the current conditions and understand the site context.

The existing vegetation on site consists of a sparse mix of native trees along the southwestern right-of-way, along the residences fronting Hayden Road is a mix of saguaro and other residential planting, toward the northwestern right-of-way the plants transition into a mix of native trees as the southern portion. Along the open channel on the east side there are no plants of significance except palms along the subdivision wall. At the northeastern portion of the right-of-way beyond the channel the existing plants are a sparse mix of native trees and scattered prickly pear.

This project will improve Hayden Road from Cactus to Redfield Road by improving the intersection of Cactus and Hayden by adding a center turn lane from Sweetwater Avenue to Thunderbird Road and by improving the grades at the intersection of Redfield Road and Hayden Road. Several options for improving Hayden Road were explored in the DCR submittal; the preferred method is to improve the intersection at Redfield Road and Hayden Road by providing northbound dual left turn bays from Hayden Road to westbound Redfield Road. The existing box culvert will be replaced under Redfield Road to be sized for the 100-year storm event and lowered to increase traffic flow and operational safety of the intersection. The open channel will be placed in an underground box.

The proposed improvements to Hayden Road include paving, vertical curb and gutter, sidewalks on both east and west right of ways, placing the open channel under ground in a box culvert to expand the landscape areas east of the road, installing landscape medians and at-grade decorative paved medians, irrigation at new landscaped areas,

noise mitigation, Intelligent Transportation System components, streetlights, and traffic signal modifications.

In addition, there will be a new pedestrian plaza with artistic elements at the northwest corner of Hayden Road and Redfield Road as described further in its own section below. To further introduce an artistic theme to the Hayden Road improvements metal vertical art pieces will be placed along the existing residential walls linking the plaza to the Road improvement. The vertical art elements are designed to visually break up large areas of existing residential wall in areas too narrow for tree plantings. These art elements will be free standing and placed along the Hayden Road right turn bays at the street intersections of Sutton Drive, Voltaire Avenue, and Thunderbird Road

The proposed Hayden Road improvements are made compatible with the surrounding area by utilizing the Scottsdale General Plan Character and Design guidelines and the Landscape Ordinance as our reference for developing the preliminary landscape design. Incorporating artistic elements that use materials utilized in other areas of Scottsdale to continue the City of Scottsdale's commitment to bring art into the city context.

Site constraints and issues for the landscape development include narrow widths of the right of way and adjacent existing walls. These constrained areas may restrict or effect the placement of non-vehicular traffic paths and the placement of trees for the landscape improvements. The graphics for the preliminary landscape layout, the design elements, and key map demonstrating the constraining conditions are provided with the Design Review Submittal.

Plaza at Redfield Road

The new pedestrian plaza located on the west side of Hayden Road at the Redfield Road intersection, is designed to visually signal one of the entrances into Scottsdale Airport. The main plaza area will be located on the northwest corner, with a few elements placed on the southwest corner to promote more of an airport gateway effect.

Dale Wright's weathered steel, winged-man statue, *Untitled 'Icarus,'* provided by the Scottsdale Cultural Council, is the plaza's focal point and the inspiration for its conceptual design. Icarus, the winged explorer from classical mythology, thus, served as the Muse for Logan Simpson Design Inc. (LSD) as its landscape architects probed the history of mankind's quest for flight.

To underscore the plaza's main function—announcing an entrance into Scottsdale Airport—LSD delved into mankind's progressive adventures with flight, from observing and trying to replicate birds' wings, from primitive machine-assisted flight, to modern commercial air transport, to space exploration. The driving force behind LSD's design is perhaps best captured in the following passage describing the desire to advance mankind's destiny through balanced risk-taking:

In ancient days two aviators procured to themselves wings. Daedalus flew safely through the middle air and was duly honoured on his landing. Icarus soared upwards to the sun till the wax melted which bound his wings and his flight ended in fiasco. The classical authorities tell us, of course, that he was only "doing a stunt"; but I prefer to think of him as the man who brought to light a serious constructional defect in the flying-machines of his day. So, too, in science. Cautious Daedalus will apply his theories where he feels confident

they will safely go; but by his excess of caution their hidden weaknesses remain undiscovered. Icarus will strain his theories to the breaking-point till the weak joints gape. For the mere adventure? Perhaps partly, this is human nature. But if he is destined not yet to reach the sun and solve finally the riddle of its construction, we may at least hope to learn from his journey some hints to build a better machine.

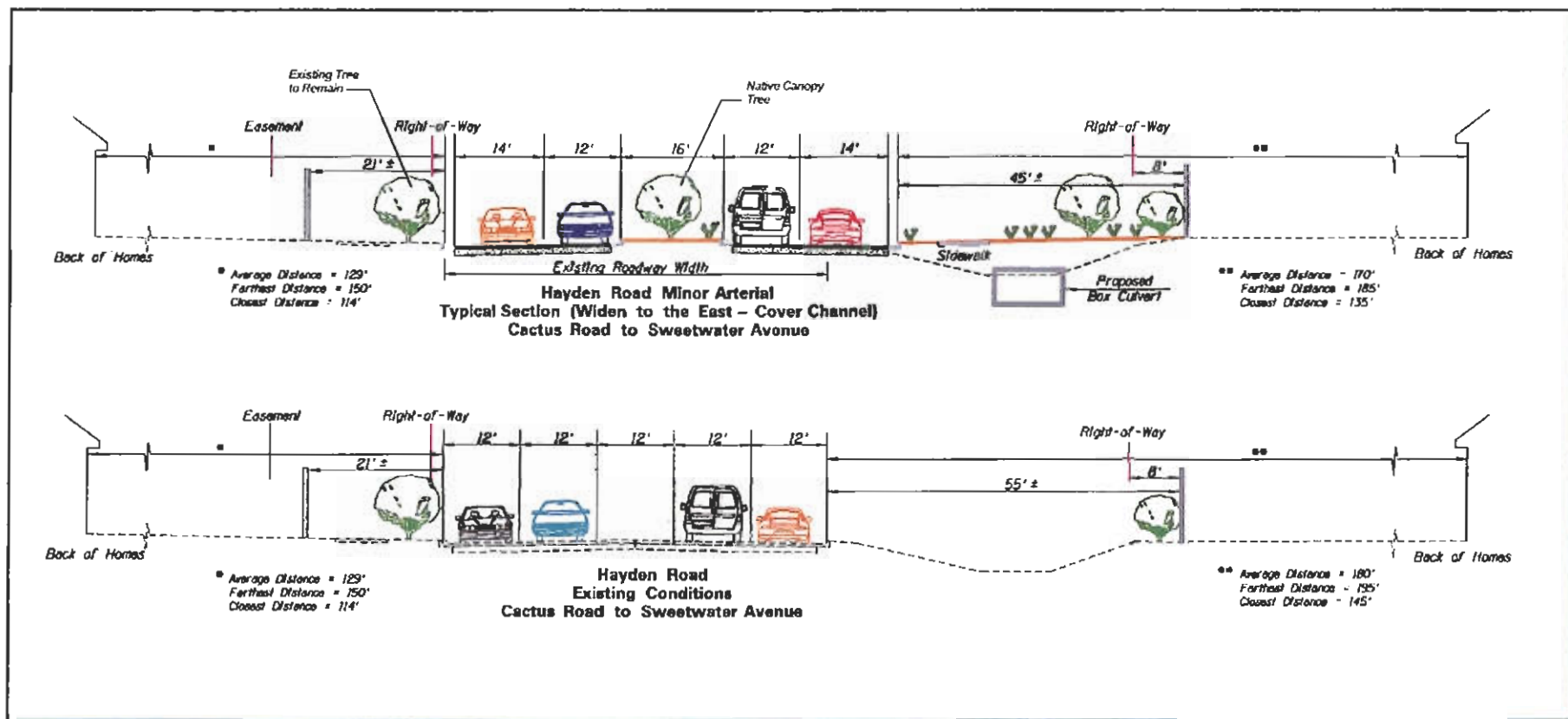
—from *Stars and Atoms* by Sir Arthur Eddington, 1927

The plaza design's organizing concept and the resultant details serve to reinforce the sense that the statue is about to alight in symbolic flight from the ground. LSD developed the plaza's elements to symbolize the Earth in relation to the larger solar system, one suggestive of mankind's ever-expanding frontiers. The main open area in the plaza is an elliptical concrete space shaped to mimic Earth's path around the Sun. Low concrete walls and an at-grade concrete band further reflect Earth's annual circuit. Embedded in this concrete band is a short passage of inspirational flight-related text. The importance of Wright's steel *Icarus* is emphasized by having him rise above eye level from a concrete plinth positioned where the Sun would be in this symbolic celestial alignment.

The plaza design also highlights the historic development of flying machines and the frontiers opened to mankind through airplanes and space travel. Concrete bollards and textured markings in the low walls are placed at the compass points of Earth's path to acknowledge the navigation methods used in early flight. Constellations embedded in the oval plaza represent the space between Earth and the Sun and beyond. They also represent another navigation method that guided the first night flights.

In the landscape areas flanking the plaza, several vertical mesh screens of varying heights visually buffer the plaza from the surrounding development. Additionally, the screens connote a veil of the unknown that lies outside the confines of Earth: we can currently glimpse beyond our immediate environment, but we have much yet to explore. The main plaza's screening motif is carried to the southwest corner, along with some plaza paving materials, to unify the intersection while indicating that further distances of space are less known by mankind.





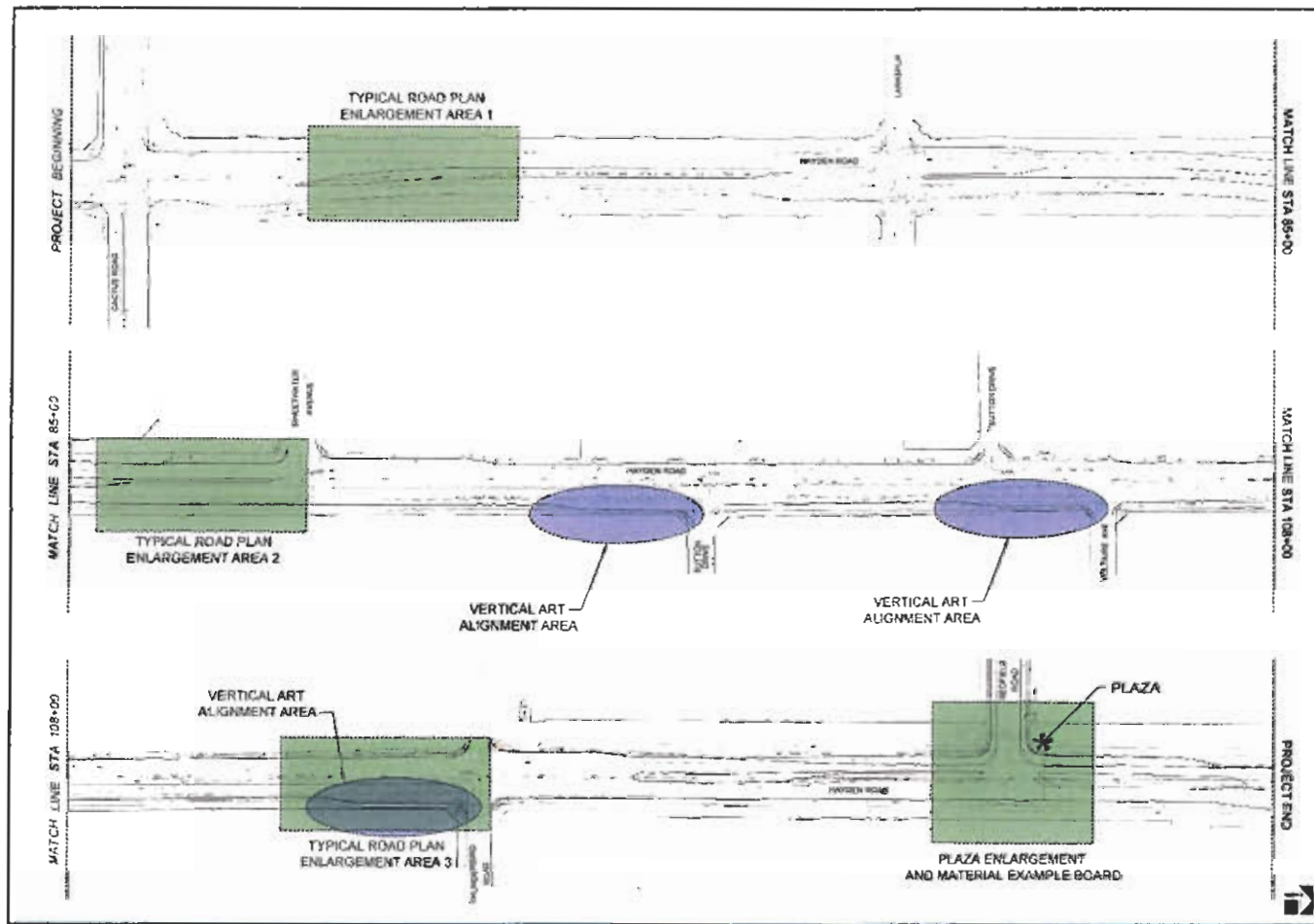
Hayden Road Existing Conditions and Proposed Improvements Cactus Road to Thunderbird Road



HAYDEN ROAD IMPROVEMENTS (CACTUS ROAD TO REDFIELD ROAD)

TYPICAL ROADWAY SECTION





Preliminary Plant List

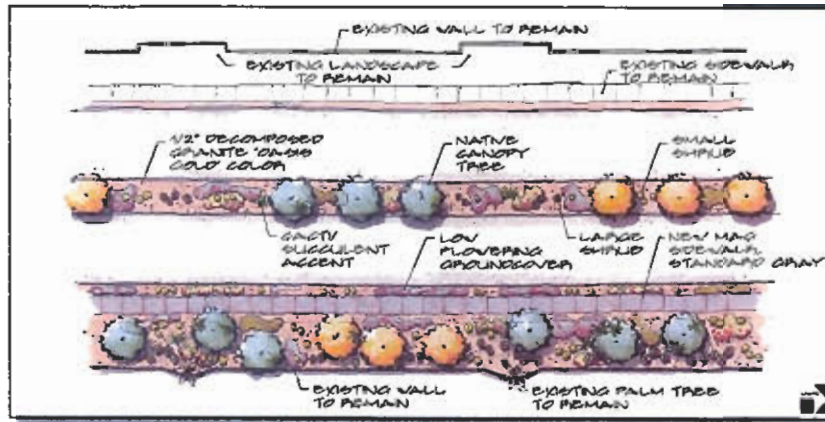
Botanical Name	Common Name
Trees	
<i>Cercidium floridum</i>	Blue Palo Verde
<i>Olneya tesota</i>	Desert Ironwood
<i>Prosopis velutina</i>	Native Mesquite
<i>Cercidium microphyllum</i>	Little Leaf Palo Verde
<i>Pithecellobium flexicula</i>	Texas Ebony
<i>Chilopsis linearis</i>	Desert Willow
Shrubs	
<i>Ambrosia deltoidea</i>	Triangle-leaf Bursage
<i>Calliandra eriophylla</i>	Pink Fairy Duster
<i>Trixis californica</i>	Trixis
<i>Zephyranthes candida</i>	White Star Lily
<i>Senna species</i>	Senna
<i>Larrea tridentata</i>	Creosote
<i>Leucephyllum species</i>	Texas Sage
Groundcover	
<i>Ballea multiradiata</i>	Desert Marigold
<i>Dalea species</i>	Dalea
<i>Penstemon species</i>	Penstemon
<i>Erigeron species</i>	Buckwheat
Accents	
<i>Carnegiea gigantea</i>	Saguaro
<i>Cercus peruvianus</i>	Night Blooming Cereus
<i>Yucca species</i>	Yucca
<i>Portulacaria afra</i>	Elephant's Foot
<i>Dasyliroa wheeleri</i>	Desert Spoon
<i>Asclepias tuberosa</i>	Desert Milkweed
<i>Aloe species</i>	Aloe
<i>Agave species</i>	Agave
<i>Cylindropuntia engelmannii</i>	Engelmann's Prickly Pear



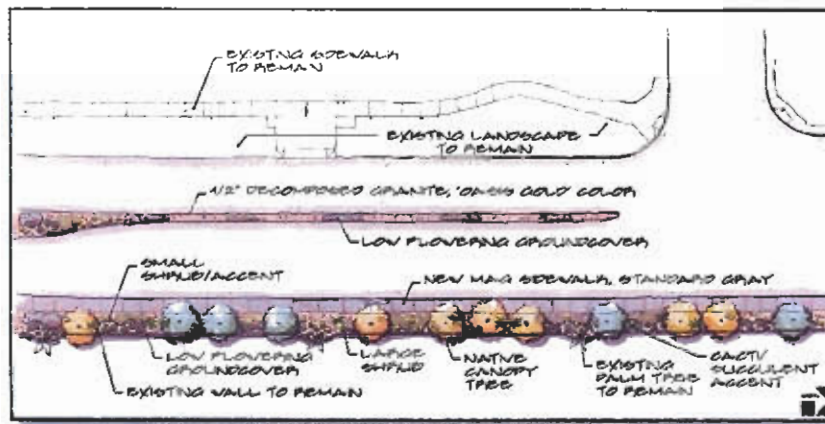
HAYDEN ROAD IMPROVEMENTS (CACTUS ROAD TO REDFIELD ROAD)

OVERALL SITE PLAN AND ENLARGEMENT AREA
KEY MAP

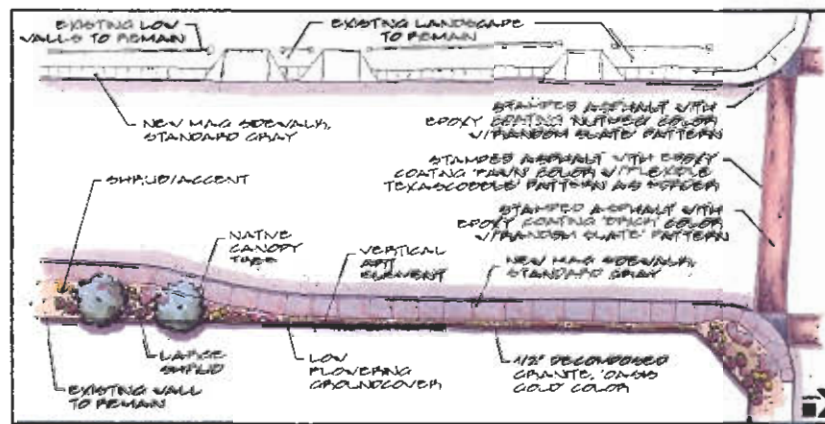




Typical Road Plan - Enlargement Area 1
(Hayden Road near Cactus Road)



Typical Road Plan - Enlargement Area 2
(Hayden Road near Sweetwater Avenue)



Typical Road Plan - Enlargement Area 3
(Hayden Road at Thunderbird Road Intersection)

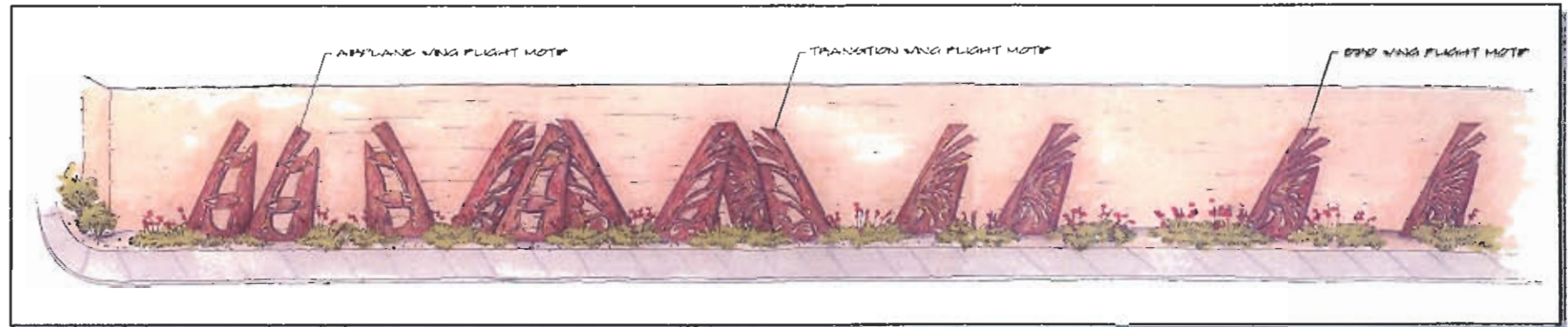


HAYDEN ROAD IMPROVEMENTS (CACTUS ROAD TO REDFIELD ROAD)

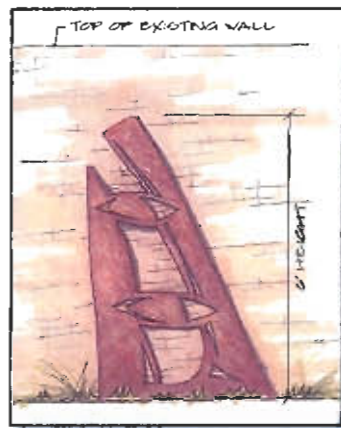
TYPICAL ROADWAY
LANDSCAPE PLANS



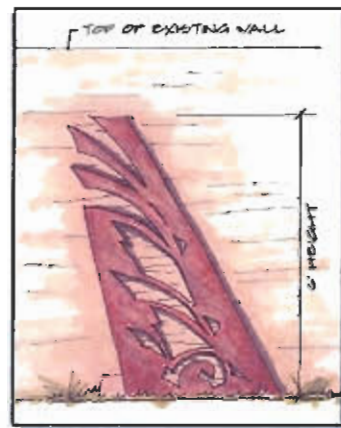
Vertical Art Element - Elevation Sketch (Free Standing Structure Mounted With Break-Away Bolts To Concrete Base)



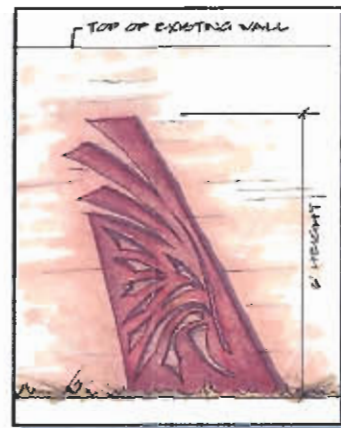
Flight Motif



Airplane Wing



Transition Wing



Bird Wing



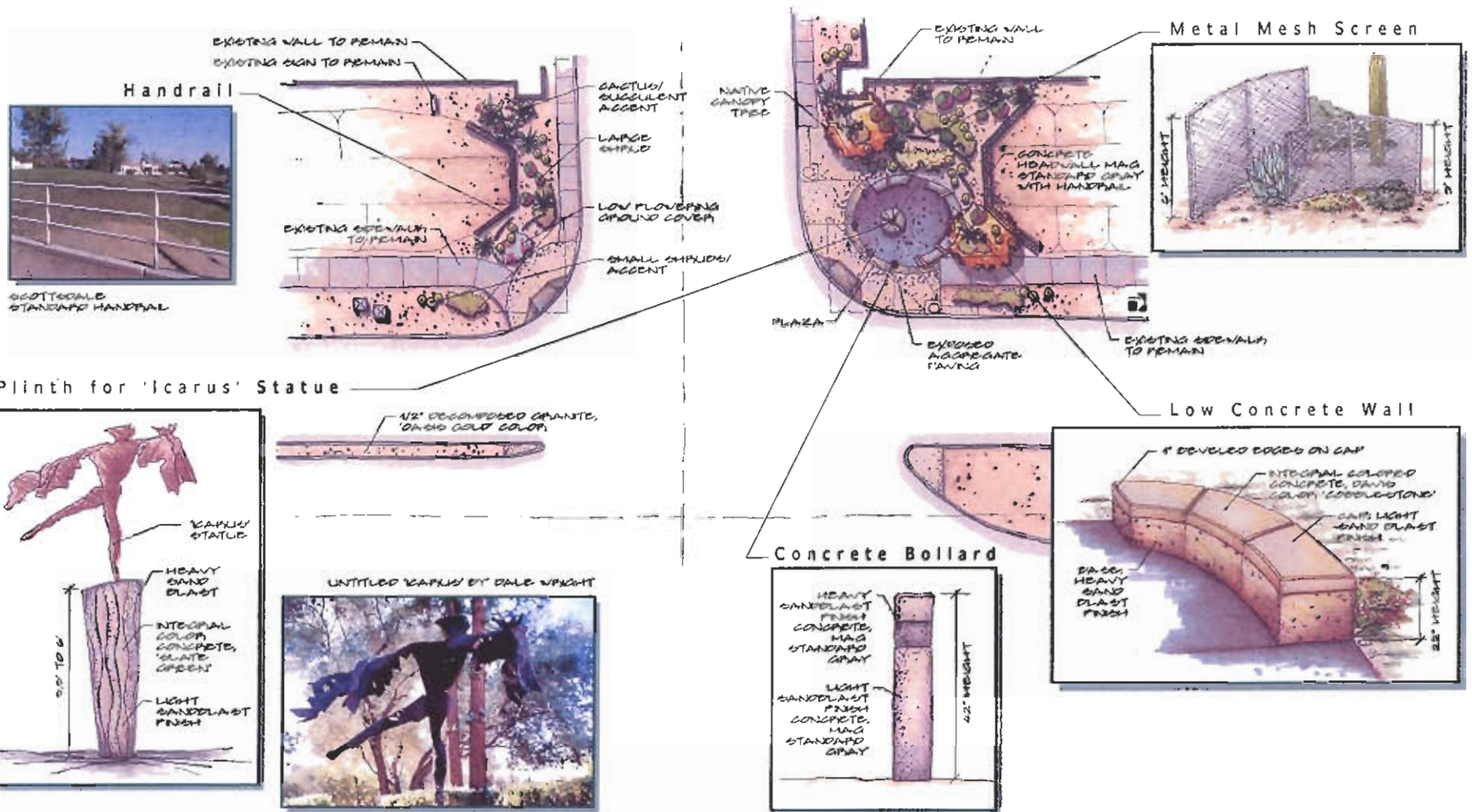
Wing Material
Rusted Steel
Sheet Metal



HAYDEN ROAD IMPROVEMENTS (CACTUS ROAD TO REDFIELD ROAD)

VERTICAL ART ELEMENT



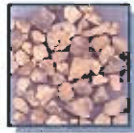


HAYDEN ROAD IMPROVEMENTS (CACTUS ROAD TO REDFIELD ROAD)

PLAZA DESIGN ELEMENTS



Decomposed Granite



1/2" MIXED
DARK GOLD OR
SUPERNOVA
GOLD COLOR

Handrail Paint

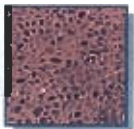


WHITE



VEGETARIAN
RECEPTIVE

Exposed Aggregate Concrete Finish



1/2" RIVER RUN
MASH, 00% DRY
MIX, STANDARD
GRUNT

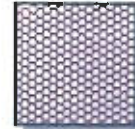
- MEDIAN
DULL NOSE
- PLAZA PAVING



Metal Mesh Screens



1/4" WIRE MESH
ON 45° ANGLE



1/4" CIRCULAR
HOLE MESH

Integral Color Concrete



DARK COLOR
"GREEN GLAZE"

- STATIC
PLANT
- INFORMATIONAL
TEXT BAND



DARK COLOR
"COPPERSTONE"

- PLAZA
PAVING
- LOW WALL

Constellations:

Star Patterns Projected
Into The Oval Paving Area
(installed flush with plaza paving)



STEEL METAL DISKS 1" TO 2 1/2" DIAMETER

INFORMATIONAL
PLANT ELITE -
SAND PLASTIC INTO
INTEGRAL COLOR
CONCRETE BAND

COLLAPD

EXPOSED
AGGREGATE
PAVING

Plaza at Redfield Road and Hayden Road

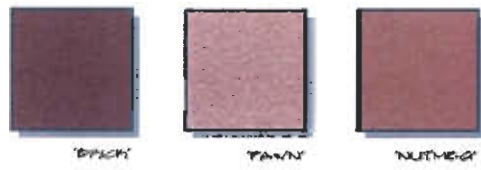


HAYDEN ROAD IMPROVEMENTS (CACTUS ROAD TO REDFIELD ROAD)

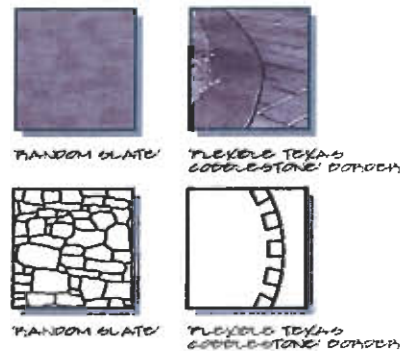
MATERIAL EXAMPLES



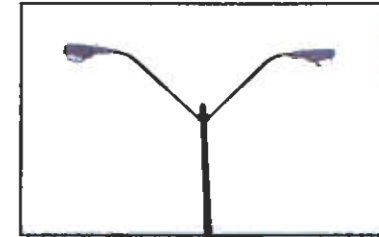
Stamped Asphalt Colors ('Street Print' Colors)



Stamped Asphalt Patterns ('Street Print' Patterns)

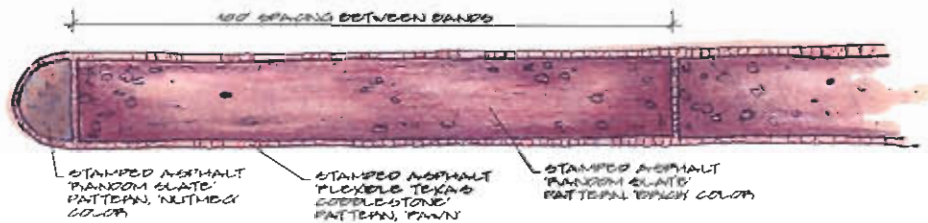


Cobrahead Street Lights



ALL STANDARD POLES, MAST ARMS,
AND LUMINAIRE

At Grade Median: From Sweetwater Avenue to Thunderbird Road (Stamped Asphalt With Epoxy Coating)



HAYDEN ROAD IMPROVEMENTS (CACTUS ROAD TO REDFIELD ROAD)

AT-GRADE MEDIAN MATERIAL EXAMPLES
AND STREET LIGHT

